Claims Listing

Claims 1-10 (Cancelled).

Claim 11 (Previously Presented). A vaccine comprising an antigenically active substance and a gastric acid reducing substance.

Claim 12 (Previously Presented). The vaccine of claim 11, wherein the gastric acid reducing substance is present in an amount sufficient to increase the pH in the stomach to between pH 4 and pH 7.

Claim 13 (Previously Presented). The vaccine of claim 11, wherein the gastric acid reducing substance inhibits gastric acid formation or binds gastric acid.

Claim 14 (Previously Presented). The vaccine of claim 12, wherein the gastric acid reducing substance inhibits gastric acid formation or binds gastric acid.

Claim 15 (Previously Presented). The vaccine of claim 13, wherein the gastric acid reducing substance is selected from the group consisting of antacids, H_2-receptor antagonists and proton pump inhibitors.

Claim 16 (Previously Presented). The vaccine of claim 14, wherein the gastric acid reducing substance is selected from the group consisting of antacids, H_2-receptor antagonists and proton pump inhibitors.

Claim 17 (Previously Presented). The vaccine of claim 15, wherein the proton pump inhibitors are selected from the group consisting of omeprazole, lansoprazole, pantoprazole and rabeprazole.

Claim 18 (Previously Presented). The vaccine of claim 16, wherein the proton pump inhibitors are selected from the group consisting of omeprazole, lansoprazole, pantoprazole and rabeprazole.

Claim 19 (Previously Presented). The vaccine of claim 15, wherein the H_2 receptor antagonists are selected from the group consisting of cimetidine, ranitidine, omexetidine, famotidine, roxatidine and nizatidine.

Claim 20 (Previously Presented). The vaccine of claim 16, wherein the H_2 receptor antagonists are selected from the group consisting of cimetidine, ranitidine, omexetidine, famotidine, roxatidine and nizatidine.

Claim 21 (Previously Presented). The vaccine of claim 11, wherein the antigenically active substance is one or more natural antigens, synthetic antigens, antigen mimotopes, or a combination thereof.

Claim 22 (Previously Presented). The vaccine of claim 12, wherein the antigenically active substance is one or more natural antigens, synthetic antigens, antigen mimotopes, or a combination thereof.

Claim 23 (Previously Presented). The vaccine of claim 21, wherein the natural antigen or synthetic antigen and/or antigen mimotopes are coupled to a carrier.

Claim 24 (Previously Presented). The vaccine of claim 22, wherein the natural antigen or synthetic antigen and/or antigen mimotopes are conjugated to a carrier.

Claim 25 (Previously Presented). The vaccine of claim 23, wherein the natural antigen or synthetic antigen and/or antigen mimotopes are conjugated to a carrier.

Claim 26 (Previously Presented). The vaccine of claim 22, wherein the antigen mimotopes are conjugated to a carrier as a monomer, dimer, trimer, or oligomer.

Claim 27 (Previously Presented). The vaccine of claim 23, wherein the antigen mimotopes are conjugated to a carrier as a monomer, dimer, trimer, or oligomer.

Claim 28 (Previously Presented). The vaccine of claim 26, wherein single or multiple monomeric, dimeric, trimeric, or oligomeric antigen mimotopes are bound to the carrier.

Claim 29 (Previously Presented). The vaccine of claim 27, wherein single or multiple monomeric, dimeric, trimeric, or oligomeric antigen mimotopes are bound to the carrier.

Claim 30 (Previously Presented). The vaccine of claim 11, wherein the antigenically active substance is a tumor antigen.

Claim 31 (Previously Presented). The vaccine of claim 12, wherein the antigenically active substance is a tumor antigen.

Claim 32 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof an effective amount of an antigenically active substance and an effective amount of a gastric acid reducing substance, wherein said method produces an immune response to the antigenically active substance.

Claim 33 (Previously Presented). A method of claim 32, wherein the gastric acid reducing substance is administered in an amount sufficient to increase the pH in the stomach to between pH 4 and pH 7.

Claim 34 (Previously Presented). The method of claim 32, wherein the antigenically active substance and gastric acid reducing substance are administered simultaneously.

Claim 35 (Previously Presented). The method of claim 32, wherein the antigenically active substance is administered after administration of the gastric acid reducing substance.

Claim 36 (Previously Presented). The method of claim 32, wherein the antigenically active substance and gastric acid reducing substance are released simultaneously in the stomach.

Claim 37 (Previously Presented). The method of claim 32, wherein the antigenically active substance is released in the stomach after release of the gastric acid reducing substance.

Claim 38 (Previously Presented). The method of claim 32, wherein the antigenically active substance is one or more natural antigens, synthetic antigens, antigen mimotopes, or a combination thereof.

Claim 39 (Previously Presented). The method of claim 38, wherein the natural antigen or synthetic antigen and/or antigen mimotopes are coupled to a carrier.

Claim 40 (Previously Presented). The method of claim 39, wherein the antigen mimotopes are conjugated to a carrier as a monomer, dimer, trimer, or oligomer.

Claim 41 (Previously Presented). The method of claim 32, wherein the antigenically active substance is a tumor antigen.

Claim 42 (Previously Presented). The method of claim 32, wherein the gastric acid reducing substance inhibits gastric acid formation or binds gastric acid.

Claim 43 (Previously Presented). The method of claim 32, wherein the gastric acid reducing substance is selected from the group consisting of antacids, H_2-receptor antagonists and proton pump inhibitors.

Claim 44 (Previously Presented). The method of claim 32, wherein the proton pump inhibitors are selected from the group consisting of omeprazole, lansoprazole, pantoprazole and rabeprazole.

Claim 45 (Previously Presented). The method of claim 15, wherein the H_2 receptor antagonists are selected from the group consisting of cimetidine, ranitidine, omexetidine, famotidine, roxatidine and nizatidine.

Claim 46 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 11, wherein said method produces an immune response to the antigenically active substance.

Claim 47 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 12, wherein said method produces an immune response to the antigenically active substance.

Claim 48 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 13, wherein said method produces an immune response to the antigenically active substance.

Claim 49 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 14, wherein said method produces an immune response to the antigenically active substance.

Claim 50 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 15, wherein said method produces an immune response to the antigenically active substance.

Claim 51 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 16, wherein said method produces an immune response to the antigenically active substance.

Claim 52 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 17, wherein said method produces an immune response to the antigenically active substance.

Claim 53 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 18, wherein said method produces an immune response to the antigenically active substance.

Claim 54 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 19, wherein said method produces an immune response to the antigenically active substance.

Claim 55 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 20, wherein said method produces an immune response to the antigenically active substance.

Claim 56 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 21, wherein said method produces an immune response to the antigenically active substance.

Claim 57 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 22, wherein said method produces an immune response to the antigenically active substance.

Claim 58 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 23, wherein said method produces an immune response to the antigenically active substance.

Claim 59 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 24, wherein said method produces an immune response to the antigenically active substance.

Claim 60 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 25, wherein said method produces an immune response to the antigenically active substance.

Claim 61 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 26, wherein said method produces an immune response to the antigenically active substance.

Claim 62 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 27, wherein said method produces an immune response to the antigenically active substance.

Claim 63 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 28, wherein said method produces an immune response to the antigenically active substance.

Claim 64 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 29, wherein said method produces an immune response to the antigenically active substance.

Claim 65 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 30, wherein said method produces an immune response to the antigenically active substance.

Claim 66 (Previously Presented). A method of vaccination comprising orally administering to a subject in need thereof the vaccine of claim 31, wherein said method produces an immune response to the antigenically active substance.